

AMENDMENTS TO THE CLAIMS:

Claims 1-4 (cancelled).

5. (currently amended) A transport system for transporting and handling microtiter ~~plate~~ plates, for use in high throughput screening, diagnosis and/or combinatorial chemistry comprising:

modules with devices for at least one or more of the following:

preparing specimens, introducing specimens, optical readout, plate storage, and devices for further processing steps or readout steps;

at least one central transport system; ~~and~~

internal transport system for transporting the microtiter plates between said different devices and said at least one central transport system for asynchronous plate transfer between individual modules via input and output buffers, said internal transport system transporting the microtiter plates by means of revolving tables with sliding units; and

wherein the input and output buffers are provided within the individual modules.

6. (cancelled).

7 (cancelled).

8. (previously presented) The transport system according to claim 5, wherein at least one of the modules is connected with a local computer with externally standardized interface and the transport and/or processing and/or loading and/or optical readout are/is controlled by a master computer via these interfaces.

9. (new) The transport system according to claim 5, including a sensor which detects whether or not the respective side of the revolving table is unoccupied to ensure that no

collisions occur so that a microtiter plate can be loaded for return transport.

10. (new) The transport system according to claim 5, including means for providing a clocked operation so that a revolving table is always inserting one microtiter plate and guiding out another microtiter plate.